



## Case Study: Schneider Electric

### Overview

With a presence in 100 countries, 137,000 employees and €25,7 billion revenue in 2018, Schneider Electric is leading the digital transformation of energy management and automation. The company does 90% of its business on energy demand, covering 4 main markets: Residential & Building, IT (Data centers & networks), Industrial and Infrastructure.

Schneider Electric has a broad partnership with Senseye. They are a Senseye customer and Senseye is a digital ecosystem enabler on the Schneider Electric "Exchange" ([exchange.se.com](http://exchange.se.com)). Together they collaborate on driving a deeper integration at both product and business levels.

### Challenges

Schneider Electric Le Vaudreuil factory in France is recognized by the World Economic Forum as one of the world's top nine most advanced "lighthouse" sites, applying Fourth Industrial Revolution technologies at large scale. It was experiencing machine-health and unplanned downtime issues on a critical machine within their manufacturing process. They were looking for a solution that could easily leverage existing machine data feeds, be used by machine operators without requiring complex setup or extensive training, and with a fast return on investment.

"Digitization continues to revolutionize the way we work and behave. The world can no longer work in independent silos; the need for better integration and collaboration has unearthed new opportunities and solutions.

Schneider Electric Exchange [exchange.se.com](http://exchange.se.com) brings together a diverse ecosystem of digital innovators and experts, such as Senseye, enabling the co-creation of solutions and enriching learning and speed through collective intelligence. Together this digital ecosystem creates, collaborates, and scales business growth."

Cyril Perducat, EVP IoT & Digital Offers, Schneider Electric



## Solution

Initially, Schneider Electric ran an analysis on the problematic machine to determine the main cause of the downtime and assess the machine health. After this analysis, they discovered it was partly due to the long timeframe applied for changing old parts. To address this issue Schneider Electric began regularly changing components. However, only 18% of the unplanned downtime was related to the age of components.

Based on this, Schneider Electric installed temperature and current sensors to monitor this critical machine's behavior. The data from these sensors was stored in Aveva Insight, then passed into Senseye PdM to be analyzed against historical data. Using powerful AI and ML algorithms based on mechanical frameworks, Senseye PdM was able to automatically provide maintenance engineers with alerts before the machine would fail. For example, machine operators were notified before a spindle or counter spindle would break giving a 7-point improvement in OEE.

Following that success, Senseye PdM is now being rolled out across Schneider Electric's Global Supply Chain business unit, where it will be used to monitor a range of assets such as pumps, motors, and conveyors at different sites.

## Outcomes

- Predictive maintenance best practices deployed for a leading "lighthouse" site.
- Gathered more machine insights and improved critical machine uptime.
- Reduced the maintenance costs on a single machine by 20%.
- Achieved a fast ROI.
- Resulted in deeper collaboration between Senseye and Schneider Electric.

## EcoStruxture

In 2016 Schneider Electric launched EcoStruxture, its open IoT-enabled architecture platform that allows organizations to leverage connected devices, sensors, and other machines systems. Senseye, via its product Senseye PdM, provides its cloud-based intelligent predictive maintenance solutions for Schneider Electric to ensure plant, process and asset uptime. By the end of 2020, the company's goal is to have more than 100 of its factories using this powerful unified machine technology.

"It's imperative that digital transformation is regarded as worthwhile beyond the technical benefits of connectivity and digitization. Only by being part of a community like Schneider Electric Exchange and by collaborating can we fill the gaps in technology, in turn providing customers a full predictive maintenance solution as opposed to technical building blocks."

**Robert Russell, CTO, Senseye**